## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

AMPEX CORPORATION,	)	
Plaintiff,	) ) ) C.A. No. 0	4-1373-KAJ
V.	ý	
EASTMAN KODAK COMPANY, ALTEK CORPORATION and CHINON INDUSTRIES, INC.,	REDA	CTED
Defendants.	)	
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## **DEFENDANTS' OPENING BRIEF IN SUPPORT OF THEIR MOTION FOR** SUMMARY JUDGMENT OF NONINFRINGEMENT

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#### T. STATEMENT AND NATURE OF PROCEEDING

Ampex Corporation ("Ampex") commenced this action on October 21, 2004, accusing Eastman Kodak Company ("Kodak"), Altek Corporation ("Altek"), and Chinon Industries ("Chinon") of infringing U.S. Patent No. 4,821,121 (the "121 patent") – a nowexpired patent directed to "electronic still store" devices used to digitize and store single frame images captured from a television signal. Although the '121 patent is devoid of reference to any technologies other than electronic still stores, Ampex's complaint alleges that the Defendants have infringed the '121 patent based on their making, using, selling, offering for sale, and/or importation of certain Kodak digital still cameras. (See Second Am. Compl., ¶¶ 13-15.)<sup>1</sup>

Fact and expert discovery have concluded in this case (except for issues pertaining solely to the Defendants' advice of counsel defense), and a hearing on claim construction and dispositive motions is scheduled for July 13, 2006. The Court is scheduled to conduct a pretrial conference on November 7, 2006, and an 8-day jury trial is scheduled to begin on December 4, 2006. (See Oct. 17, 2005 Scheduling Order at 6-7 (DI53).)

#### II. SUMMARY OF ARGUMENT

After many months of intense discovery in the ITC investigation and this litigation, the factual record pertaining to the Defendants' alleged infringement now is closed. That record makes clear that the parties' remaining disagreements concerning infringement are not factual in nature - indeed, the structure and relevant operation of the accused Kodak digital cameras is undisputed in all material respects, and Ampex's own experts have conceded non-

On that same date. Ampex also filed a complaint with the International Trade Commission (ITC) asserting infringement of the '121 patent by the same parties, with respect to the same products, and based on the same conduct accused here. Pursuant to statute, the Court stayed this litigation pending final resolution of the ITC action. Ampex subsequently withdrew its ITC complaint, and the ITC proceeding formally concluded on August 23, 2005 without any grant of relief to Ampex. The Court then lifted the stay in this case.

infringement under the claim constructions proposed by the Defendants. Because no material factual issues genuinely remain in dispute, Ampex's infringement allegations are ripe for resolution by summary judgment now.

As detailed further below, no reasonable jury could conclude that the Defendants have infringed any of the asserted claims. The undisputed factual record - which includes critical admissions of non-infringement by Ampex's own experts - confirms that the accused digital cameras do not satisfy two limitations that appear in each asserted claim:

"Video:" Each asserted claim requires the receipt, transfer, and storage of 1. digitized "video" image data - a requirement that only can be understood within the "television" and "electronic still store" context of the '121 patent as data corresponding to a single frame captured from "a series of related electronic images [frames] created for rapid display to allow the appearance of movement." As Ampex's experts concede, that limitation is not literally met here. There is no question that still images taken using Kodak's accused digital cameras are not generated by capturing data corresponding to a single image from a series of moving pictures (e.g., from a television signal).

Ampex also is precluded as a matter of law from asserting the doctrine of equivalents. If accepted, an argument that "video" image data can be captured from any source - not just from a series of moving images - would violate the "all elements" rule by reading the word "video" out of the claims.

"Said Data:" Each asserted claim also requires the system to receive captured 2. video "data" that corresponds to a "full size" image, to use that "said data" to generate a "reduced size" version of the full size image, and to store the "said data" for later access. In other words, the single frame of video "data" received by the claimed system must be the same "data" used to generate a "reduced size" image and the same "data" saved to storage for later access. None of Kodak's accused digital cameras meet this requirement.

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Moreover, because Ampex *specifically amended* its claims during prosecution to *add* the "said data" limitation, the doctrine of prosecution history estoppel precludes Ampex as a matter of law from asserting that different data is equivalent to "said data". Application of the doctrine of equivalents also is barred as a matter of law by the "all elements" rule.

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The undisputed record further confirms that the accused Kodak cameras fail to satisfy

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numerous additional elements required by some, but not all claims, including the following three limitations.

3. "Direct" and "Directly:" As explained in the Defendants' claim construction brief, the terms "direct transfer," "transfer ... directly," and "transferring ... directly" should be construed consistently with Ampex's representations to the Patent Office to mean a transfer "with no circuit therebetween" - a construction that, in the context of asserted claims 7, 8, and 10, requires image data to be transferred from more permanent "bulk storage memory" to "random access memory" (RAM) without the use of an "intervening circuit."

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Therefore, the Defendants cannot literally infringe claims 7, 8, or 10 as a matter of law because any connection that exists between the permanent storage and SDRAM components is an indirect one.

Ampex also added "direct" and "directly" as limitations during prosecution to overcome a patentability rejection. Having done so, Ampex now is estopped as a matter of law from attempting to assert the doctrine of equivalents. And in any event, to assert infringement under an equivalents theory would require Ampex to violate the "all elements" rule by contending that a "direct" transfer is the same as an indirect one. Federal Circuit precedent precludes such a result as a matter of law.

4. "Random Access Memory ... Having an Input Port and an Output Port." Claims 8 and 14 require the claimed RAM to have at least two physically separate ports: "an input port" that receives data "and an output port" that sends data.

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Thus, no literal infringement exists. Ampex's

prosecution amendment to add the "an input port and an output port" limitations to claims 8 and 14 also precludes any equivalents as a matter of law, and the "all elements" rule prevents Ampex's attempt to vitiate the "an input port and an output port" limitations by broadening the claims to reach single-port RAM.

5. "External Source:" The accused Kodak cameras do not literally meet the limitation of claim 12 requiring the system to receive video image data from an "external source" (e.g., from a television camera connected to the claimed "video still store system"). Indeed, Ampex has never even suggested that the accused cameras capture and/or receive video image data from an electronic source "external" to the camera housing. Equivalents also are barred as a matter of law given that Ampex added the "external source" limitation to overcome a rejection (such that prosecution history estoppel applies), and because equating an "external" source with a source internal to the accused cameras would vitiate the claim element (such that the "all elements" rule applies).

Ampex's failure of proof with respect to these five claim limitations is fatal to its case as a matter of law. Accordingly, the Court should reject Ampex's improper effort to expand the narrow focus of its electronic still store patent to reach the Defendants' very different accused digital camera technology, and enter summary judgment of non-infringement with respect to each of the asserted claims.

#### III. STATEMENT OF UNDISPUTED FACTS

#### The Parties A.

Ampex, a company once widely known in the field of analog video technology for broadcast television (see A2), claims to own all rights under the '121 patent by assignment. Ampex had designed, made, and sold electronic still store devices for use in the broadcast television marketplace at the time of the application for the '121 patent, but no longer sells electronic still stores - and at no time has Ampex ever designed, made, or sold digital still

Since its founding in 1892, Kodak has been a pioneer in the film imaging industry. Over the last several decades, Kodak also has emerged as a leader in the field of digital imaging (for example, Kodak developed the first prototype digital camera in 1975). At present, Kodak sells more than two dozen different varieties of digital still cameras for consumer use.<sup>2</sup> Altek is a Taiwanese corporation founded in 1996 that, among other things, designs and manufactures digital still cameras sold under the Kodak brand.

#### В. The '121 Patent

On its face, the '121 patent claims priority to an application filed more than twentythree years ago on April 8, 1983. The '121 patent, which is entitled "Electronic Still Store With High Speed Sorting and Method of Operation," issued on April 11, 1989. The patent expired on April 11, 2006. (121 patent, A7-14.)

#### 1. **Background of the Purported Invention**

The '121 patent is directed "to a digital electronic still store for broadcast television signals..." (Id., 1:11-14, at A9.) At the time of the claimed invention, those in the television industry used electronic still stores to capture a single "frame" from a motion picture (typically broadcast at 30 frames per second) received from an analog television signal. The still store then could digitize the captured frame (to the extent not already digitized) and temporarily store the resulting data in RAM (called a "frame store") or on

<sup>2</sup> Chinon, which was acquired by Kodak (through its subsidiaries), no longer exists as a separate legal entity.

The specification repeatedly confirms that the '121 patent is directed to the broadcast television context. (See, e.g., id. at 1:17-21 (A9) (referring to use of the claimed invention "to generate a continuously displayed television image"); id. at 1:43 (A9) (referring to use of the invention in a "real time [television] broadcast"); id. at 2:48-51 (A9) (discussing benefits of invention "during a television broadcast"); id. at 3:55-58 (A10) (describing storage of "video" generated pursuant to "NTSC" television standard); id. at 4:34-36 (A10) (explaining use of output processor "for forming a television signal in a standard format"); id. at 4:41-44 (A10) (describing a mode that "outputs a continuous television image in digital data form").)

more permanent storage (variously called "bulk storage," "disk store," or "image store"). t/d., 1:15-17, at A9.)

At some later point in time, the stored "data defining the [full size] image" could be accessed and then "repetitively read out to generate a continuously displayed television image " (Id., 4.41-44, at A10.) After being output from the system, the full size image could be resized and inserted in the "corner of a live studio image depicting a newscaster describing a news event" (id., 1:23-26, at A9), as shown below.



The T21 patent also discusses a separate mosaic function for the output of multiple reduced size images. In particular, when using prior art electronic still store systems, "it often [was] desirable to generate a reduced size multiple image picture for editing or other purposes " (Id., 1:28-30, at A9.) According to the "121 patent specification, however, image reduction processes used by prior art electronic still stores caused problematic "delay:"

[E]ach of the several images which are to be simultaneously displayed must first be read from the disk store as full size images and then reduced for insertion into the multi-image display. This process takes  $\frac{1}{2}$  to  $\frac{1}{2}$  seconds for each image and results in a delay of several seconds for the composite multiimage display. Such a time delay is at best disconcerting for a busy editor and precludes use of the editing features of the system during a real time broadcast.

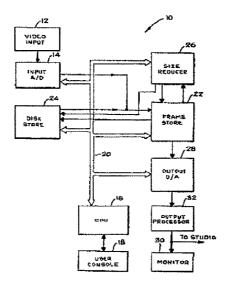
(Id., 1.34-43, at A9 (emphasis supplied).)

Notwithstanding the existence of numerous prior art references addressing and resolving this very issue, the "121 patent claims to have solved the "delay" problem by using a "frame store" operable in two modes: (i) a broadcast mode "that receive[s] from the image store, store[s], and repetitively generate[s] a full spatial resolution output image frame" (the "full size" mode) (id., 2:6-8, at A9); and (ii) an editing/browsing mode in which the frame store receives "from the image store and store[s] a plurality of reduced spatial resolution frames" and "repetitively generate[s] an output image frame having an image from each of the plurality of reduced spatial resolution image frames" (i.e., the mosaic mode). (See id., 2:11-13, at A9.)

The '121 patent maintains that this scheme drastically reduces the time to output images in the mosaic mode, "[b]ecause the images are read from the image store in reduced size and spatial resolution." (Id., 2:32-43, at A9.) According to the inventor, this "rapid response rate of the system" enabled "busy editors" to overcome the "delay" supposedly present in the prior art by allowing for the "outputting of data frames containing multiple reduced size images on demand during a television broadcast." (Id., 2:44-51, at A9.)

#### 2. The Sole Disclosed Embodiment

The patent discloses just one embodiment, depicted in the single figure shown below:



(Id., 2:54-59, at A9 (describing the figure as "a block diagram representation of an electronic

still store system in accordance with the invention").)

In operation, system 10 includes a "video input circuit 12," which "may be another electronic still store system, a TV camera, or some other source of video data from which one or more frames of a video image may be captured." (Id., 2:65-3:1, at A9.) The patent makes clear that "the video input 12 will include appropriate video signal decoding means to process video data received from sources that provide the data in encoded form." (Id., 3:8-11, at A10.) In other words, any processing of the captured television image data is performed outside the claimed invention (e.g., by the television camera) or exclusively by video input circuit 12.

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Individual television frames input by video input circuit 12 are converted to digital signals by analog-to-digital (A/D) converter 14.4 A/D converter 14 sends the digitized "video data representing a frame of video image" to frame store 22, which is comprised of a "random access memory." ('121 patent, 3:44-49, at A10.) Frame store 22 may send the digitized video data to size reducer 26, which may "convert the video data to a quarter spatial resolution copy." (Id., 4:1-7, at A10.) Size reducer 26 then transfers the quarter spatial resolution copy either to frame store 22 or to disk store 24. (Id., 4:9-12, at A10.)

When used in a "normal" television "broadcast mode, frame store 22 receives a full resolution frame of video data from disk store 24 and outputs a continuous television image

the form of video signal described in the specification REDACTED references a video signal designed in accordance with well-known television standards, such as NTSC. (See the Declaration of James Storer in Support of Defendants' Motion for Summary Judgment of Non-Infringement ("Storer Decl.") which is being filed herewith, at ¶ 13; REDACTED

in digital data form in response thereto." (Id., 4:41-44, at A10.) To do so, frame store 22 repeatedly outputs video image data retrieved from disk store 24 to output digital-to-analog converter 28, which receives the "digital output data and converts it to an analog video signal...." ('121 patent, 4:28-34, at A10.) Output processor 32 ("a conventional video signal output processor") then "form[s] a television signal in a standard format" which can be viewed on monitor 30 or "communicated to studio equipment for further use, broadcasting, or storage." (Id., 4:34-40, at A10.) Moreover, in "a second, editing or browsing mode," a series of reduced size images can be output for display "in a 4 x 4 array as a mosaic which fits within a normal full size image." (Id., 4:45-50, at A10.)

#### C. The Accused Kodak Digital Cameras

Ampex does not contend that any of the Defendants have made, used, sold, offered for sale, or imported an electronic still store.

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Nevertheless, Ampex alleges that more

than forty Kodak digital still cameras infringe claims 7, 8, and 10-15 of the '121 patent based on the ability of those cameras to create a reduced size or thumbnail image.

The '121 patent discloses two different ways to speed up the transfer of video pixel data between disk store 24 and frame store 22. First, claims 7, 8, and 10 avoid unnecessary circuitry processing delays by requiring a "direct" transfer of image data between the two components i.e., a transfer "with no circuit therebetween." (See '121 File History, at A145-46.) Second, claims 8 and 14 require frame store 22 to contain separate input and output ports. This two-port requirement allows frame store 22 to receive image data rapidly from input A/D converter 14, disk store 24, and/or size reducer 26, at the same time it is sending captured image data rapidly to disk store 24, image reducer 26, and/or output digital-to-analog converter 28. (See '121 patent, claims 8 and 14, at A11-13).

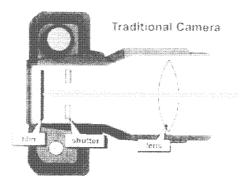
<sup>&</sup>lt;sup>6</sup> Central processing unit (CPU) 16 is a Z80 microprocessor "connected to receive operator commands from a user console 18." (Id., 3:34-37, at A10.) Via system bus 20, CPU 16 controls various components of system 10, including frame store 22 (id., 3:44-46, at A10), size reducer 26 (id., 4:1-2, at A10), and disk store 24 (id., 4:45-50, at A10). The '121 patent does not describe the transfer of image data to CPU 16.

The features, resolution capabilities, and options offered by the accused Kodak cameras vary from model to model:

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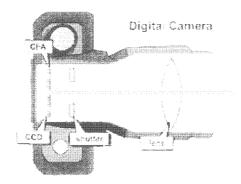
#### . see Use of the Accused Cameras to Take a Picture

When the user of a conventional film camera presses the shutter button, the camera shutter opens and light from the scene visible through the lens is focused on light-sensitive film inside the camera (the film then is developed chemically and printed on photographic paper, resulting in a photograph of the scene). That capture process is shown below



(See Storer Decl. § 23.)

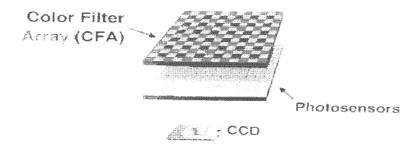
When the user of a Kodak digital camera presses the shutter button (in "still" capture mode), the shutter opens and the incoming light is focused on an image sensor (rather than film) called a charge-coupled device (CCD) imager:



(See Id., § 24.) The CCD contains millions of tiny light-sensitive photosensors or "pixels" that record the intensity of the incoming light by accumulating an electrical charge, the more intense (or the longer the duration of) the light that hits a pixel, the greater the stored charge. However, the pixel photosites located on a CCD are "colorblind"—that is, they only respond to the total amount of the light that hits their surface and they do not differentiate between colors (See id., ¶ 32.)

To record color information, each pixel of a CCD is covered by a tiny filter that corresponds to one of the primary RGB colors (red. green, and blue). The collection of filters used by a CCD is called a "color filter array" or "CFA" pattern.

Most of the accused digital cameras have two modes of operation, a "video" mode in which moving pictures are captured, and a "still" mode in which a single image is captured. The video mode is not at issue in this case because the cameras in that mode do not generate reduced size image data from the captured moving picture data. (See id., ¶ 26.)



(See id. # 33.)

For each pixel, the corresponding photosensor captures the intensity of the light that passes through the red, green, or blue filter covering the pixel (that is, just red light, just green light, or just blue light). Because the filters correspond to just one of the three primary colors, each CCD pixel (photosensor) does not receive the remaining incoming light that corresponds to the other two primary colors. As explained in detail below, the accused digital cameras later utilize a series of complex algorithms to generate data that contains fullcolor information for each pixel location. (See id., \$\mathbb{S} 31-61.)

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When the shutter closes during still image capture, the accused Kodak cameras convert the charge that corresponds to the intensity of captured light for each CCD pixel into an analog CFA signal that then is converted by an analog-to-digital converter into a digital signal (comprised of 0s and 1s).



This digitized raw output from the millions of pixels on the CCD is called raw "CFA" image data. (See id., § 35.)

CFA image data is not intended for display. In fact, as shown in the demonstrative below, if viewed, the raw CFA image data would represent an image that appears drastically

# different from the actual photographed scene:



Original Scene

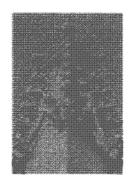
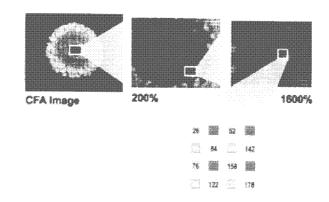


Image Data Represented By CFA Array

(See id., \$ 36.)

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## IV. ARGUMENT

As a matter of law, Ampex cannot demonstrate infringement by the Defendants. The undisputed factual record presently before the Court confirms that Kodak's accused digital cameras do not satisfy the following five limitations of the asserted claims either literally or under the doctrine of equivalents: (i) "video" (all asserted claims); (ii) "said data" (all asserted claims); (iii) "direct" (claims 7, 8, and 10); (iv) "random access memory ... having an input port and an output port" (claims 8 and 14); and (v) "external source" (claim 12). In fact, Ampex's experts have conceded literal non-infringement under the Defendants' claim construction, and the doctrines of prosecution history estoppel and the "all elements" rule preclude Ampex as a matter of law from seeking to prove infringement under the doctrine of equivalents. This failure of proof warrants the entry of summary judgment of non-infringement with respect to all asserted claims.

## A. Legal Standard for Summary Judgment

Summary judgment should be granted "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c); see Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247 (1986). Although allegations of patent infringement present a question of fact, summary judgment of non-infringement is "appropriate where the patent owners' proof is deficient in meeting an essential part of the legal standard for infringement, because such failure will render all other facts immaterial." TechSearch L.L.C. v. Intel Corp., 286 F.3d 1360, 1369 (Fed. Cir. 2002).

#### The Accused Kodak Cameras Do Not Satisfy the "Video" Limitation. В.

As explained more fully in the Defendants' claim construction brief, the term "video" - as used in the "television broadcast" context of the '121 patent - means "a series of related electronic images created for rapid display to allow the appearance of movement." (Defendants CC Br. at pp. 5-9). Ampex cannot satisfy this limitation either literally or under the doctrine of equivalents.

## Ampex Cannot Demonstrate Literal Infringement. 1.

REDACTED	no literal infringement exists under the
Defendants' construction of "video" (	REDACTED
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) This is so beca	ause none of the accused Kodak cameras can accept
or capture image data from an "electronic	e still store system, a TV camera, or some other
source of video data." (See '121 patent,	2:65-68, at A9; Storer Decl., ¶ 29.)

In other words, unlike the electronic still stores described and claimed in the '121 patent, the Kodak digital cameras operating in "still" mode do not capture or receive single frame images from a input television signal or any other source of moving images (nor does the data form any part of a video). As such, because the source of the data did not come from, or form a part of, a series of related electronic images created for rapid display to allow the appearance of movement (i.e., "video"), the still image data captured and generated by the accused cameras simply cannot be classified as "video pixel data" and cannot correspond to a captured "video image" - as required by every asserted claim.

This result makes sense. In stark contrast to the '121 patent, the accused cameras have nothing to do with electronic still store devices used in a "television broadcast" setting - the plain and singular focus of the specification, claims, and file history of the '121 patent. (See '121 patent, 1:17-21, 1:43, 2:48-51, 3:55-58, 4:34-36, 4:41-44, 2:65-68, at A9-10; see

also Storer Decl., ¶¶ 5-20.) As such, the '121 patent is irrelevant to the very different digital still cameras accused in this litigation – a type of camera not mentioned even once in the '121 REDACTED patent. (

#### 2. Ampex Cannot Demonstrate Equivalence.

Ampex cannot escape this result by alleging that the accused Kodak cameras satisfy the "video" limitation under the doctrine of equivalents. First, an argument that "video" image data can be captured from any source, including from the light intensity values captured by a still camera lens - and not just from a series of moving images - would violate the "all elements" rule by reading the word "video" out of the claims. See Seachange Int'l, Inc. v. C-Cor Inc., 413 F.3d 1361, 1378 (Fed. Cir. 2005) ("The 'all elements rule' provides that the doctrine of equivalents does not apply if applying the doctrine would vitiate an entire claim limitation."). That is, permitting the claims to be met by any "pixel data" and any "image" - regardless of source - would render the word "video" superfluous as used in the terms "video pixel data" and "video image." This would be improper.

The U.S. Supreme Court and Federal Circuit both have made clear that equivalence arguments that would vitiate one or more claim elements - like the "video" arguments raised by Ampex here - present questions of law proper for resolution on summary judgment. See Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 40 (1997) (describing the "all elements" rule as providing "special vigilance against allowing the concept of equivalence to eliminate completely any such elements"); Freedman Seating Co. v. Am. Seating Co., 420 F.3d 1350, 1362 (Fed. Cir. 2005) (granting summary judgment of non-infringement where equivalence argument improperly would vitiate a claim limitation); Riles v. Shell Exploration & Prod. Co., 298 F.3d 1302, 1317 (Fed. Cir. 2002) ("The All Elements Rule is applied by courts as a legal matter" as a "legal limitation[] upon the doctrine of equivalents"). In fact, a grant of summary judgment is mandated in such circumstances: "Where the evidence is such

that no reasonable jury could determine two elements to be equivalent, district courts are obliged to grant partial or complete summary judgment." Hilton Davis, 520 U.S. at 39 n.8 (emphasis supplied).

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These differences are "not a subtle difference in degree," but rather 'a clear, substantial difference or difference in kind" - thus, summary judgment is warranted. Freedman, 420 F.3d at 1361 (quoting Ethicon Endo-Surgery v. U.S. Surgical Corp., 149 F.3d 1309, 1321 (Fed. Cir. 1998); see Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1423 (Fed. Cir. 1997) ("[A] claim element is equivalently present in an accused device if only 'insubstantial differences' distinguish the missing claim element from the corresponding

aspects of the accused device.").

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Ampex REDACTED has argued that the accused cameras infringe under the doctrine of equivalents, even under Defendants' construction of "video," based on the "preview" and "burst" features of the accused cameras. Both arguments fail as a matter of

law:

"Preview" mode allows the user to "frame" the subject to be photographed by displaying a low-resolution image of the object on the LCD of the camera.

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"Burst mode" allows users to take typically three or four still photographs in rapid succession, but much slower than the typical 30 frames per second video rate. That mode is not meant for or able to play images back in rapid succession to provide the illusion of movement; 18 the "video" mode – not accused here by Ampex - is used for that purpose.

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In sum, these substantial and undisputed differences between the television broadcast "video" image data of the claimed invention, and the still image data generated by the accused Kodak cameras, precludes any equivalence finding as a matter of law. See Sage Prods., 126 F.3d at 1423 ("Although equivalence is a factual matter normally reserved for a fact finder, the trial court should grant summary judgment in any case where no reasonable fact finder could find equivalence."), see also, e.g., Talbert Fuel Sys. Patent Co. v. Unocal Corp., 347 F.3d 1355, 1360 (Fed. Cir. 2003) (granting summary judgment of noninfringement under doctrine of equivalents where "no reasonable trier of fact could find only insubstantial differences between [the claimed invention and accused devices]").

C. The Accused Kodak Cameras Do Not Satisfy the "Said Data" Limitation.

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<sup>&</sup>lt;sup>18</sup> "Burst" mode provides users with the ability to capture multiple frames of fast-moving objects (e.g., sporting events, small children). (See Storer Decl. at ¶ 65.)

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1. Ampex Cannot Demonstrate Literal Infringement.
REDACTED for each asserted claim of the '121 patent, the claimed
system must (among other things): (i) receive and store video image "data" corresponding to
a "full size image," (ii) use that same "data" (i.e., the "said data") to generate a "reduced size
image;" and (iii) save that same "data" (i.e., the "said data") to storage for later retrieval.
( REDACTED Storer Decl., ¶ 20). 19 In other words, the "full size" video
image data received by the system and used to generate the "reduced size" image must be the
same "data" saved to storage for later access. <sup>20</sup>
The Kodak cameras accused here do not literally meet that requirement.
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19 REDACTED "data" is nothing more than a set of "numbers."
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Storer Claim Construction Decl., ¶ 55; see also '121 patent, 3:19-24, at A10 (explaining that the input "data" received by the claimed system "is represented by three eight bit data bytes").)
This limitation makes perfect sense in the "television broadcast" context of the '121 patent. The very goal of such a system was to receive digitized data corresponding to a captured video frame, and to store the <i>exact same</i> data to permanent storage such that the image could be rapidly retrieved and output for display appearing <i>exactly like</i> the original captured frame of video.
REDACTED Storer Decl., ¶ 19.)

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In the final processing step, the accused cameras use a JPEG compression technique to compress the size of the stored image data. This JPEG compression inevitably results in the loss of pixel data, leading to even further changes in the stored image data.

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Accordingly, the Court should grant Defendants summary judgment of no literal infringement with respect to each asserted claim.

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# 2. Ampex Cannot Prove Infringement Under the Doctrine of Equivalents.

As a matter of law, the doctrine of prosecution history estoppel precludes Ampex from asserting the doctrine of equivalents with respect to the "said data" element, which was added by amendment to asserted claims 7, 8, 10, 11, and 12. (See File History, at A103-05, A112-29 (amending claims to overcome a § 112 rejection by adding "said" and "the" before "video pixel data" to clarify that "said" and "the" refers "back to the pixel data recited" earlier).) See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 535 U.S. 722 (2002), on remand, 304 F.3d 1289 (Fed. Cir. 2002) (holding that prosecution history estoppel prevents a patentee from asserting the doctrine of equivalents with respect to a claim limitation narrowed in response to a rejection); see Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575, 1579 (Fed. Cir.), cert. denied, 116 S. Ct. 515 (1995) (application of prosecution history estoppel raises question of law amenable to resolution on summary judgment). Claims 13, 14 and 15, which also have a "said data" requirement, were added in prosecution after claims 7, 8, 10, 11, and 12 were amended to add the "said data" requirement to those claims, and also are not entitled to any range of equivalents. See American Permahedge, Inc. v. Barcana, Inc., 105 F.3d 1441, 1445-46 (Fed. Cir. 1997).

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D. The Accused Kodak Cameras Do Not Satisfy the "Direct" and "Directly" Limitations of Claims 7, 8, and 10.

As explained in the Defendants' claim construction brief, the terms "direct transfer," "transfer ... directly," and "transferring ... directly" as used in claims 7, 8, and 10 should be construed to mean a transfer "with no intervening circuit there between" - i.e., the same construction that Ampex urged upon the Patent Office during prosecution to obtain the '121 patent. (See Defendants CC Br. at pp. 15-17) Accordingly, those claims require that there be "no intervening circuitry" between the bulk storage and RAM - a requirement not met here either literally or by equivalents.

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1. Ampex Cannot Demonstrate Literal Infringement.

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#### 2. Ampex Cannot Prove Infringement Under the Doctrine of Equivalents.

Ampex also is precluded as a matter of law from asserting infringement under the doctrine of equivalents. During prosecution, to overcome a patentability rejection, Ampex amended asserted claims 7, 8, and 10 by adding the words "direct" and "directly," and in doing so represented to the Patent Office that those terms as used in the context of the '121 patent mean "with no other circuit there between." (See File History, at A145-46) As such Ampex now is estopped from attempting to assert the doctrine of equivalents – particularly against devices like Kodak's accused cameras that have one or more intervening "circuit[]s therebetween" RAM and bulk storage memory. See, e.g., Festo, 535 U.S. at 733-34.

Ampex's equivalence arguments also are barred as a matter of law by the "all elements" rule. To maintain an equivalence argument, Ampex must contend that the "direct" connection limitation is met by the undisputedly indirect connection that exists in the accused cameras between the SD/MMC card or internal memory and the SDRAM. Any argument claiming that such "indirect" routing is equivalent to a "direct" transfer would vitiate the requirement of a "direct" transfer and fail as a matter of law. See, e.g., Seachange, 413 F.3d at 1378 (Fed. Cir. 2005) (claim limitation requiring a "direct" connection not equivalent as a matter of law to an "indirect" connection).

### E. The Accused Cameras Do Not Satisfy the "Input Port" and "Output Port" Limitations Required By Claims 8 and 14.

As made clear in the Defendants' claim construction brief, the requirement of "random access memory means having an input port and an output port" refers to a RAM with at least two physically separate ports - one for the input of data ("an input port") and another for the output of data ("an output port"). (Defendants CC Br. at pp. 17-19.)

#### 1. Ampex Cannot Demonstrate Literal Infringement.

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Therefore, summary judgment of literal noninfringement with respect to claims 8 and 14 is warranted.

> Ampex Cannot Prove Infringement Under the Doctrine of 2. Equivalents.

The prosecution history confirms that Ampex added the "an input port and an output port" language to claims 8 and 14 to overcome prior art and section 112 rejections. (File History, at A68-69, A114.) Accordingly, the doctrine of prosecution history estoppel bars Ampex as a matter of law from arguing equivalence with respect to those limitations. See, e.g., Festo, 535 U.S. at 733-34.

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## F. The Accused Cameras Do Not Satisfy the "External Source" Requirement of Claim 12.

Claim 12 of the '121 patent requires an "external source" to supply digital image data to the claimed "video still store system." As explained in the Defendants' claim construction brief, "external" as used in claim 12 means a source located outside of, and at a separate physical location from, the physical location of the other components that make up the "video still store system." (Defendants' CC Br. at pp. 18-21.) As a matter of law, Ampex cannot demonstrate that the Defendants have satisfied this limitation on the undisputed factual record before the Court.

#### 1. Ampex Cannot Demonstrate Literal Infringement.

REDACTED no literal infringement exists under the Defendants' plain meaning construction of "external source." REDACTED This is because, unlike the very different electronic still store devices described and claimed in the '121 patent, the accused Kodak cameras do not capture data from a source that is external to the camera. Instead, the cameras capture and generate image data using means that exist solely within the housing of the camera itself – i.e., not from an "external source." (Storer Decl., ¶ 29.) REDACTED

> 2. Ampex Cannot Prove Infringement Under the Doctrine of Equivalents.

During prosecution, Ampex added the "external source" limitation to claim 12 to

overcome a section 112 rejection. (File History, at A107, A119). As such, Ampex is estopped as a matter of law from arguing equivalents with respect to the "external source" limitation. See, e.g., Festo, 535 U.S. at 733-34.

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The "all elements" rule also precludes Ampex from alleging equivalents with respect to the "external source" element. An argument that an "internal" source of "video" data is equivalent to an "external" source effectively would vitiate the limitation by eliminating the word "external" from the claim. *See, e.g., Seachange*, 413 F.3d at 1378 (holding that a claim limitation requiring a direct connection cannot be met under the doctrine of equivalents by an indirect connection). Therefore, the Defendants are entitled to summary judgment of noninfringement of claim 12 as a matter of law.

## V. CONCLUSION

For the foregoing reasons, the Defendants respectfully request that the Court grant them summary judgment of noninfringement with respect to all asserted claims.

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## **CERTIFICATE OF SERVICE**

I hereby certify that on May 31, 2006, I electronically filed the following document with the Clerk of the Court using CM/ECF which will send notification of such filing to the following:

# DEFENDANTS' REDACTED OPENING BRIEF IN SUPPORT OF THEIR MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT

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I hereby certify that on May 31, 2006, I have forwarded the above-noted document to the following as noted below:

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